AOD 206

AGRICULTURAL OUTLOOK DIGEST

Approved by the Outlook and Situation Board, January 28, 1975

Farmers May Expand Acreage Again This Year

U.S. farmers reported in January that they planned to plant about 4 million more acres to 11 major crops for 1975 harvest than were planted last season. These plantings may total 274.3 million acres.

The acreage gains for 1975 are concentrated in soybeans and wheat.

The prospective plantings shown in the table below are for 50 States, and are based on a January 1 USDA survey of growers in 35 States that grow the bulk of our major crops.

	1975 plantings	
	Indicated	Change from 1974 plantings
	Million acres	*Percent*
Corn	77.4	0
Sorghum	19.4	+10
Barley	9.8	+8
Oats	17.5	-4
Feed grains	124.1	+1
Wheat	74.1	+4
Soybeans	57.7	+8
Cotton	9.5	-32
Rice	2.5	-3
Flaxseed	1.8	+6
Rye	3.2	0
Sugarbeets	1.5	+21
Total	274.4	+2

[1] Based on the January report of prospective planting in 35 States. Acreage for remaining States is assumed to change at the same rate as the included States. Includes winter wheat and rye as reported in the December winter wheat report. [2] Does not add because of rounding.

Note: A detailed comparison of prospective and actual plantings in 1974 appears on page 3, under "Easing Controls."

The wheat acreage includes winter wheat already seeded, which totals 55.5 million acres, up 3.1 million from the prior season, as well as spring wheat still to be planted.

Feed grain planting prospects were up very modestly. Little change is projected for corn planting. There will be fewer acres of oats but more for barley, and much more for grain sorghums, as farmers fill in fields left vacant by declining cotton acreage.

Prospective cotton acreage is down precipitously—by a third—to 9.5 million acres. Declines in cotton prices in recent months have brought them to a level where cotton will be less profitable than other crops for many growers.

CROP RESERVES

Recent crop estimates indicate that our reserves of wheat, corn, and soybeans at the end of the 1974/75 marketing year may not be quite as low as the levels projected in December.

Estimated 1974 wheat production took an upturn in January. In addition, stocks of wheat on hand January 1 in the United States of 1,100 million bushels implied a low level of wheat feeding during recent months. The January wheat stocks were a fifth larger than those of a year earlier. However, a heavy export pace, predicted for the first half of 1975, may leave ending stock levels on June 1 very close to the 247 million bushels of June 1974.

Production of corn was estimated slightly larger than in December. This means the prospective carryover next October 1 may not decrease as much as anticipated. October ending stocks thus may total 300 million bushels, down from 483 million a year before.

Output of major 1974 crops

Crop, unit	Final estimate Jan. 1, 1975	Change from previous estimate
	Million units	
Corn, bu.	4,651	+30
Sorghums, bu.	628	+19
Barley, bu.	308	-17
Oats, bu.	621	-27
Wheat, bu.	1,793	+13
Rice, cwt.	114	+1
Soybeans, bu.	1,233	-11
Cotton, bale	11.7	0
Tobacco, lb.	1,958	-5
Sugarbeets, tons	22.3	0
Sugarcane, ton	25.8	+0.5
Potatoes, cwt.	340	+1
Dry edible beans, cwt.	21	-1
Dry edible peas, cwt.	3	0
Hay, ton	127	+3

January 1 found stocks of corn and other feed grains totaling 125.5 million short tons, 22 percent under the 1974 level. This was due to smaller beginning supplies, rather than to heavy use last fall. Use of all feed grains apparently was a fifth less during October-December 1974 than in the same quarter of 1973. For the entire 1974/75 feed grain marketing period, domestic use and exports are projected well below the high levels of last season. In view of this season's tight supplies, ending stocks of only

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Commodities

Long-Term Cropping Patterns Reflect Policy Shifts

W. Herbert Brown*

After years of gradual decline, the number of crop acres jumped in 1973. There was a second big jump in 1974, and further increase seems likely this year. ERS economist W. Herbert Brown puts this recent trend in crop acreage in historical perspective:

For the third year in a row, U.S. farmers have stated their intentions to expand crop production—and hopefully this year the weather will go along with their plans.

To smooth the way for more production, the Secretary of Agriculture has announced that the provisions limiting acreage to allotment levels and the conservation reserve provision of the 1973 Farm Act will not be in effect. This announcement, together with the freedom to substitute crops to maintain allotment history, allows farmers to shift acreage to crops they feel they can do best with. However, the set-aside provision of the 1973 act could be reactivated by the Secretary in future years if the supply-demand outlook appears to threaten farm incomes.

The current policies for U.S. agriculture mark a sharp change in direction. During the late 1950's, the 1960's, and even the early 1970's, the thrust of these policies was to hold down production of most major crops and dispose of accumulated Government stocks, in order to support farm income. Here, briefly, are some of the cropping patterns of this era, followed by a look at changes of the early 1970's.

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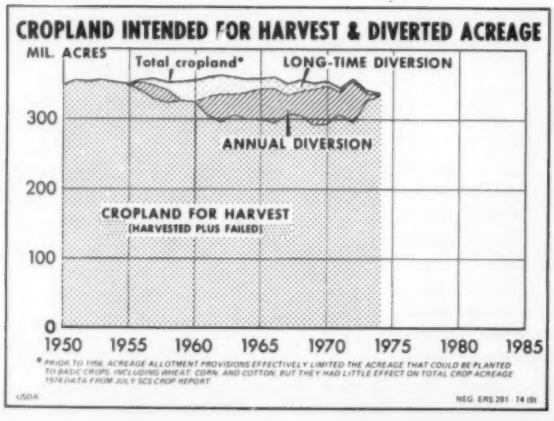


Two Decades of Controls

During 1953-72, cropping patterns were greatly influenced by commodity programs and the Soil Bank Program of the late 1950's. In 1954 allotments were reestablished for corn in commercial areas and wheat and cotton in all producing areas. Wheat and cotton acreages were reduced in 1954, but corn acreage was not reduced until later. Farmers, however, increased the planted acreages of grain sorghum, barley, oats, rice, and soybeans. This left only a small reduction in total planted acres of principal crops and increased planted acreage of feed grains.

Subsequent changes in programs reduced the total planted acreages of principal crops. These changes included (1) reestablishing allotments on rice in 1955; (2) establishing the Soil Bank Program; (3) including grain sorghum in the feed grain program beginning in 1961 and barley in some years beginning in 1962; and (4) providing diversion and set-aside for wheat, feed grains, and cotton. Increased demand for soybeans and technological developments such as new varieties and chemical weed control also facilitated adjustments in cropping patterns.

The full effect of these factors is indicated by changes in acreages from 1953—the year before allotments were reestablished—to 1972. Total planted acreage of principal crops dropped from 353 million acres in 1953 to 295 million in 1972, a decline of 16 percent. During this period, wheat plantings dropped 24 million acres (44 percent), and oats dropped 23 million acres (53 percent).

Since 1953, corn and cotton acreages also declined by 18 and 48 percent, respectively. Flaxseed acreage declined by 3.6 million acres or 75 percent. Flaxseed lost a large part of its market for use in paint to low-fat or nonfat drying oils.

Sorghum, barley, and soybean plantings gained during this period. The increase in soybean acreage actually began in the 1930's and then tripled over the 1953-72 period. The 30.2-million-acre increase was generally associated with decreased acreage of corn in the Southeast and South Central regions and decreases generally for oats, cotton, hay, cropland pasture, and idle cropland. Hay acreage over

the two decades dropped 15 million acres (20 percent). Acreage planted to cotton decreased about 13 million acres (48 percent). Both rice and peanut acreages declined 17 percent during the period while sugarbeets increased about four-fifths.

Easing Controls

In 1973, with increased demand for most crops, commodity programs were changed to stimulate production. Set-aside and conservation base requirements were eliminated for the 1974 and 1975 crops. Marketing quotas were removed for the 1974 rice crop. Farmers were also given an opportunity to cancel long term land retirement contracts. These changes released nearly 60 million acres of land for production.

Planted acreage of principal crops in 1974 was up nearly 35 million acres over 1972—just over half the acreage made available by relaxing the set-aside and long term land retirement conditions. However, if weather had been more favorable last spring and farmers' March planting intentions had materialized, total planted acreage would have been up by nearly 42 million acres or about two-thirds of the acreage released for production.

Most of the increase in planted acreage from 1972 to 1974 was in wheat, corn, soybeans, rice, hay, and flaxseed. Wheat acreage increased by 15.1 million acres or 27 percent and corn planted acreage jumped by over 10 million. The increases in wheat and corn acreages were stimulated by sharp price increases as well as by program changes. When the 1972 wheat crop was planted, growers were looking back at a price of $1.34 per bushel for the 1971 crop. In 1972 the price rose to $1.76 and when farmers planted the 1974 wheat crop they were looking at a price of $3.90 per bushel for the 1973 crop. Corn producers were also thinking of higher prices with increases from $1.08 in 1971 to $1.57 in 1972 and $2.55 in 1973.

Soybean acreage in 1974 was nearly 7 million acres above 1972, but this was 3.5 million acres below the record 57 million acres in 1973. Adverse weather and competition from corn in the North Central region and cotton in the South Central region were principal reasons for the reduction. This year, farmers plan to plant record-breaking acreage of soybeans.

Cotton acreage in 1974 was only 2 percent above 1972, but the 1972 acreage had been the highest since 1965. Flaxseed and rice increased 48 and 32 percent, respectively, from 1972 to 1974. The 1973 season average price for both crops was more than double the previous year.

Shifts in Location of Production

From 1954 to 1972 planted acreage of principal crops declined 25 percent or more in the Northeast and Southeast regions and by about 20 percent in the Great Plains. In the Northwest and North Central regions the declines were less than 10 percent.

The large reduction in planted acreage in the Northeast and Southeast regions was at least partially explained by declining land in farms. In the Great Plains, the reduction was partially due to the high proportion of U.S. set-aside acreage in that region. The region accounted for over a third of the set-aside acreage in 1972 but had only about a fourth of the planted acreage.

Since 1972, trends toward a higher proportion of the U.S. total planted acreage in the North Central States, Southeast, and Great Plains regions and a smaller proportion in the Northeast region appear to be continuing.

Looking at specific crops, corn has become more concentrated in the North Central region, barley in the Northwest region and cotton has shifted some to the Southwest. Soybean acreage has increased relatively more in the Southeast and South Central regions than in the North Central region.

The distribution of wheat acreage has generally changed less than other crops. But in 1974 there was a significant increase in the proportion of wheat planted in the North Central region compared with other recent years.

COTTON

A January report that cotton producers may cut acreage by one-third for this season's plantings eloquently expresses their evaluation of the cotton situation.

The basis of their pessimism is the impact of recession and inflation on textile purchases in domestic and foreign markets.

Retailers and manufacturers have reduced their orders and production of textile products. On top of the slowdown in retail sales, they are being influenced by a desire to trim inventories and minimize borrowing at current high interest rates. The production decline has prompted substantial textile mill layoffs in recent months.

While the economic situation is the most depressing aspect of the current cotton situation, it is also a hopeful factor for the future. Economic recovery is likely to perk up mill activity, the more readily because inventory levels are being trimmed.

Domestic mill use of cotton in the 1974/75 marketing season may total only 6.1 million bales, in contrast to 7½ million used up last season.

On the export scene, from a strong 6.1 million bales shipped last season, cotton exports may slip under 4 million bales in 1974/75. The slowdown reflects not only weakened textile activity around the world but also large inventories of both cotton and textiles going into 1975.

Cotton consumption in 1975/76 will depend to a large extent on overall textile activity and the health of the general economy. Many analysts believe that the economic situation will begin to gradually improve during the latter half of 1975 and early 1976.

The 1975/76 cotton export outlook is for only slight improvement. Foreign consumption is expected to pick up somewhat as textile activity recovers. Also, foreign cotton production is expected to decline in most countries as acreage is directed to other crops. However, large cotton stocks in foreign producing nations will result in continued competition for U.S. cotton in 1975/76.

SOYBEANS

Soybeans are the center attraction in farmers' planting strategy this spring. Preliminary intentions are to plant 57.6 million acres, about 4 million more than last spring.

This potential boost for soybean supplies comes at a moment when soybean usage is taking a breather from the heavy pace of recent years. The recession, reduced feeding and production in the livestock sector, and a more copious world fats and oils supply are major causes.

Domestic use of soybean products is suffering on two fronts at once. U.S. demand for soybean oil products, familiar to consumers in the form of cooking oils, margarine, and salad dressings, is suffering from the decline in real spending power associated both with the impact of inflation and that of recession. Imported palm and coconut oils are also giving soybean oil more competition this season.

For the entire marketing year, soybean oil use probably will be off a half-billion pounds from the 7.3 billion in 1973/74. Exports of soybean oil are also estimated lower than last season's 1.4 billion pounds, declining to perhaps 1.3 billion pounds.

Soybean oil prices have suffered in the last few months. Late January prices for crude oil at Decatur ran around 32 cents per pound, down from 43 cents last August, and near January 1974 prices.

The other problem confronting sellers of soybean products is the lackluster livestock and poultry business, both here and overseas. Indicative of this problem, the number of cattle on feed in 23 States on January 1 was a fourth smaller than a year before and the smallest number for the month in a decade. Looking ahead, forecasters also predict a sharp cutback in the output of pork and poultry products for the first half of the year.

Domestic demand for soybean meal has slowed under these circumstances. Disappearance of soybean meal has been running behind year-earlier levels so far in the 1974/75 marketing season. For the entire season, soybean meal disappearance may total slightly more than 12 million tons, roughly 1½ million below last season.

Soybean meal exports for 1974 may equal the 5½ million tons exported in 1973/74. Although so far trailing last season's pace, exports are expected to pick up in response to recent low prices for meal. For all of 1974/75, they may match the 5½ million tons exported in 1973/74.

Meal prices in January for 44 percent protein meal at Decatur were about $50 per ton below the prices of a year before. Prospects for the balance of the marketing year will be largely influenced by developments affecting the entire economy as well as the agricultural sector, and by new crop prospects this summer.

Lagging soybean product markets have put a crimp in the crushing industry. Last year they expanded crushing capacity by a tenth, to 1.1 billion pounds. But soybean supplies for the current season wound up 13 percent smaller, and with slow demand crushers may process only 750 million bushels of beans this season, compared with 821 million in 1973/74.

Exports of whole soybeans are currently forecast at around 475 million bushels, compared with the record 542 million bushels shipped last season. The same factors of economic slack and bearish livestock industries affecting the American market are affecting crushers in other countries that buy our beans.

An added factor is larger supplies of competing fats and oils on the world marketplace. Brazilian soybean output and Nigerian peanut production are up sharply from the previous year. Also, Malaysian palm oil and Philippine coconut oil volumes are increasing.

Starting out very strong, soybean prices have weakened over the season. January prices paid to farmers for soybeans averaged $6.30 per bushel, in contrast to $8.17 last October. Prices could drift even lower, especially if the recession deepens and 1975 production prospects for soybeans seem favorable.

Turbulent Dairy Market

Last year saw rapid changes occurring in the dairy industry. Sales and output of milk and other dairy products underwent fluctuations which in turn brought changes in dairy prices at the farm, wholesale, and retail levels.

Robert R. Miller, ERS dairy specialist, has provided this wrapup of the 1974 dairy situation and a preview of what the early months of 1975 will bring:

In early 1974, fluid milk sales fell off, causing more milk to move into manufactured products. Butter sales were brisk last year, but cheese and nonfat dry milk sales closed out 1974 on a weak note. Retail dairy prices dipped some this summer, and have shown only small seasonal increases this winter.

Dairy stocks soon mounted, and weakened demand sent farm milk prices below 1973 levels by the fourth quarter. But feed prices continued to zoom, leaving the milk producer holding a pile of bills in one hand and smaller receipts from his buyers in the other.

From the look of things, cost-price problems may continue to plague dairy farmers in early 1975. Big dairy product stocks will reduce the impact of lower milk production. The recent boost in milk support prices along with Federal order Class I price action may help to pay the feed dealer this winter, but it will also serve to maintain retail milk prices, which may offset some expected recovery in retail sales volume.

Milk Production Dips

In December 1974, monthly milk production dropped below a year before for the first time since summer. The drop comes as high-priced feeds caused farmers to cut back on feeding grain and concentrates to their dairy cows, limiting gains in milk production per cow. However, continued low slaughter-cow prices and the lack of farm and nonfarm economic alternatives for dairymen kept milk

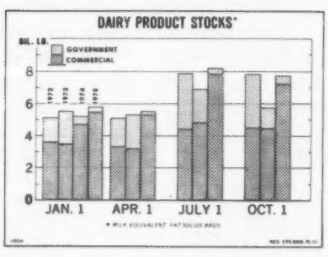
cow numbers from falling sharply. For all of 1974, milk production totaled 114.9 billion pounds, down 1 percent from 1973.

We may continue to see some small drops in milk output early this year. The recent increase in dairy support levels will likely push farm milk prices above fourth-quarter 1974 levels. With a recent easing in grain prices, the milk-feed price ratio should improve slightly, but will probably remain relatively unfavorable to heavy grain and concentrate feeding. On the other hand, low slaughter-cow prices will likely prevent sharp increases in dairy herd culling.

Although milk production may be down some early in 1975, large dairy product stocks should maintain adequate dairy supplies.

Dairy Stocks Large

Commercial stocks of dairy products remain large despite seasonal decline this winter. Estimated at 5.5 billion pounds milk equivalent on January 1, commercial dairy stocks were about a sixth larger than a year earlier. Increased demand pulled down butter stocks close to year-earlier levels, but American cheese and nonfat dry milk holdings approached previous records. Government holdings of butter and cheese continued relatively small, but nonfat dry milk stocks have increased substantially. USDA's uncommitted inventories of nonfat dry milk totaled almost 184 million pounds by the end of 1974; there were none a year before.

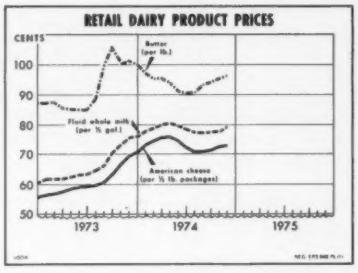


Dairy imports have slackened to more customary levels in recent months. Imports for 1974 probably were around 2.9 billion pounds milk equivalent, down from 3.9 billion pounds in 1973, but well above the average levels of recent years.

Milk Price Supports Upped

Dairy product prices had entered 1974 at record high levels. But with the increase in supplies, product prices weakened last spring and summer. Although rising this fall, by late December, all dairy product prices were back down to the floor levels set by support purchase prices.

Effective January 4, 1975, USDA increased the price support for manufacturing milk to $7.24 per 100 pounds, up from the previous level of $6.57. This action along with that taken by USDA on January 24 to bring minimum class I prices under Federal milk orders in line with the price support increase, will likely hold farm milk prices early this year slightly above the fourth-quarter 1974 level. Wholesale butter and cheese prices jumped following the announcement.



Commercial use of milk in all dairy products in 1974 was down only slightly from the previous year. One reason was that butter sales closed out 1974 on a strong note. Total butter sales in 1974 were up, reversing for the time being the long-term slump. Butter continues to be favorably priced relative to margarine going into 1975.

Although cheese sales were up about 5 percent last year, some weakness was noted at year's end. Large supplies of other high-protein foods are giving cheese stiff competition. Consumers are eating more frozen desserts, but cottage cheese consumption has fallen. Nonfat dry milk sales have declined sharply as users have looked to substitutes.

Fluid milk sales in major urban markets had pulled about even with year-earlier levels by late 1974, following declines of 5 to 6 percent early last year.

USDA dairy product purchases under the dairy price support program have been running higher this marketing year. Removals were equivalent to 1.3 billion pounds of milk during April-December 1974, about double year-earlier levels.

Dairy Imports

What would happen of the U.S. were to drop dairy import quotas? A study, prepared by ERS at the request of Congress, analyzes three trade policy alternatives for the dairy industry and the impact of each through 1980. The alternatives are: (1) continuation of the existing systems of dairy import quotas and milk price supports, (2) free trade in dairy products for all countries, and (3) opening the U.S. market unilaterally with no import quotas or domestic price supports for dairy products.

Under the current import quota system, dairy product imports would be held to their present level through 1980. U.S. milk production would increase to 119 billion pounds, 4 billion above the 1974 level. Imports would represent about 1½ percent of domestic production.

With free world trade in dairy products, U.S. milk production would be about 117 billion pounds by 1980, and imports would increase to 4½ percent of domestic production.

With a unilaterally open U.S. market, dairy product imports would initially zoom to over a tenth of domestic production. The high cost to the European Community of subsidizing large dairy exports would likely force a policy change there, and by 1980, our imports might be down to 6 percent of our milk output. Milk production here would be depressed to less than 112 billion pounds by 1980.

This alternative would result in the lowest overall dairy product supplies, and thus the highest farm milk prices by 1980. Milk prices would be slightly lower under the present price support and import quota system, and lowest under the free world trade alternative.

For a copy of *The Impact of Dairy Imports on the U.S. Dairy Industry* AER-278, clip this coupon and send to the address indicated with your name, address, and zipcode.

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Crop Reserves

Continued from page 1.

12.7 million short tons are in sight, roughly half of the prior season's level.

Ending stocks of soybeans next summer may total 100 million bushels. This would be well below the 171 million bushels carried over in 1974, but about 40 million greater than forecast in December. The change reflects slowing rates of domestic crushings and exports.

Very low demand for cotton this season both here and in other countries is causing stocks to accumulate. Ending stocks of 5.7 million bales would be up substantially from those of the two previous seasons.

It now appears that record exports from our record 1974 rice crop may allow only a moderate buildup in ending stocks from the skimpy 7 million hundredweight on hand last summer. January 1 rice stocks were around a third larger than those of a year before. Nearly all of the addition was in rough rice stocks, rather than milled rice. Use of rice during January-July 1975 will be considerably heavier than last season because of the large exports.

The table below reflects these recent revisions in the supply and demand balance of major U.S. crops.

PROSPECTIVE 1974/75 CROP SUPPLIES AND DEMAND[1]

Item	Wheat	Rice	Feed grains	Corn	Soybeans	Cotton
	Mil. bu.	*Mil. cwt.*	*Mil. S. ton*	*Mil. bu.*	*Mil. bu.*	*Mil. bales*
Supply:						
Old crop stocks	247	7.8	22.2	483	171	3.9
Outputs & imports	1,795	114.1	165.6	4,652	1,233	11.7
Total	2,042	121.9	187.8	5,135	1,404	15.6
Utilization:						
Domestic	692	36.6	141.4	3,860	[2]829	6.1
Exports	1,100	74.5	33.7	975	475	3.8
Total	1,792	111.1	175.1	4,835	1,304	9.9
Ending stocks	250	10.8	12.7	300	100	5.7

[1] 1974/75 begins July 1 for wheat, September 1 for soybeans, and October 1 for corn. [2] Includes crushing, seed, feed, and residual uses.

A Rough Crop Production Year Has Ended

The release of final 1974 crop production figures draws the statistical curtains on a year farmers will not easily forget. For many crop and livestock growers, it was a year of maximum effort but disappointing results.

Farmers planted 10 million more acres of principal crops last year, and harvested 8 million more than in 1973. But with yields down, production of all crops combined turned out 8 percent less.

Food grain and tobacco production managed substantial increases, but feed grain production slumped by one-fifth and oilseed crops, reflecting losses of soybeans and cotton, were 17 percent smaller.

With all the widely advertised shortcomings, however, it's well to recall that total crop output still exceeded all years prior to 1971.

Comparing January 1975 end-of-season crop estimates to forecasts of earlier months, corn production is indicated up about 30 million bushels from the estimate of last November. Sorghum and wheat crops are also a little larger than previously expected.

On the other hand, estimated production of other crops decreased since previous estimates were made. Among feed grains, barley and oat production decreased. Soybean production fell 11 million bushels. Peanut and tobacco production also showed slight declines. **(See table on page 1, column 3.)**

MOST CROP PRODUCTION INDEXES DROPPED IN 1974

Year	Production							
	All[1]	Feed grains	Hay and forage	Food grains	Sugar crops	Cotton	Tobacco	Oil crops
	1967=100							
1970	101	89	100	91	114	139	97	117
1971	112	116	106	107	117	145	86	121
1972	113	112	105	102	128	187	88	131
1973	119	115	110	112	112	174	89	155
1974	110	92	104	120	107	157	100	129

[1] Includes hay seeds, pasture seeds and cover-crop seeds, and some miscellaneous crop production not included in separate groups of crops shown.

Farm Economy

Selective Credit Crunch

Farmers started 1975 in the second-best income situation ever, but some could be hard pressed to close new borrowing deals or repay their old debts.

This is because the national farm income figures, which show farmers' 1974 net returns totaling close to $27 billion, mask wide differences in the income positions of crop versus livestock producers.

Crop farmers as a group are better off than they were at the start of 1974, thanks to sharply higher crop prices last year. But livestock producers have been caught in a severe cost-price squeeze which has left many of them much weaker financially.

The current outlook is for little change during 1975 in crop and livestock farmers' respective financial positions.

Crop output is expected to increase over 1974 levels if weather is normal. However, prices received for most major crops in calendar year 1975 may not decline much from 1974 levels.

Meanwhile, total marketings of livestock and livestock products may show little change from 1974. Only modest gains in livestock prices are foreseen. Consequently, the squeeze on livestock producers may continue.

Major repayment problems are expected to arise for some livestock ranchers who recently began ranching or who had expanded their operations going into 1974. They have relatively large debt commitments and relatively low current incomes.

Also, crop farmers who got poor yields because of 1974's weather reverses can be expected to carry over a large volume of short-term debt and to require large operating loans in 1975 to finance their planned production.

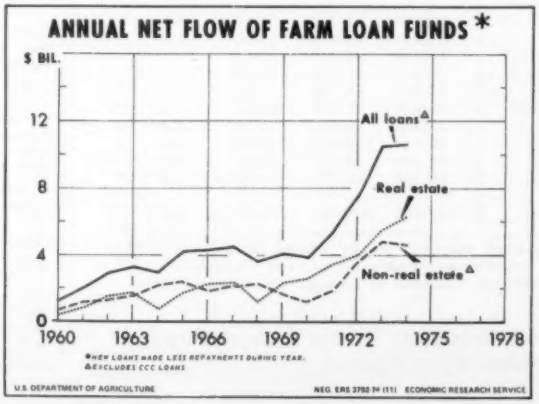
Demand for real estate and operating loans is expected to continue strong through the year—although there may be some slackening in the need for intermediate-term financing (for machinery, equipment, and livestock).

Farm real estate borrowings are forecast to reach new highs in 1975. Demand for mortgage funds is likely to stay strong, reflecting advancing farm real estate prices. Prices are up most in cash grain areas.

Among the various lender sources, commercial banks and life insurance companies may not maintain their shares of the expanding total market. Commercial banks tightened lending to farmers in 1974 and may keep the lid on in 1975. Insurance companies look for 1975 farm mortgage lending at about the same level as in 1974. However, the two major sources—the Federal land banks and individual land sellers (farmers selling their own farms)—are expected to be able to expand their lending a great deal further in 1975.

Non-real estate farm credit markets may be under less pressure in 1975 as farmers ease their purchases of capital goods. Operating costs will rise further, however.

As with their real estate loans, commercial banks' non-real estate loans will be somewhat less available in 1975 than in 1974. Deposit growth will not be as rapid, reflecting the smaller gains likely in cash farm receipts. And with less favorable income situations for many farmers, bankers and other lenders may be less willing to provide financing. An important factor for some banks has been the higher earnings they could realize by placing greater portions of their loans in nonfarm loans or investments. If short-term rates in the central money markets in 1975 are lower than in 1974—and many observers think they will be by one-half to 1 percentage point—this disparity in rates may be less of a restraining factor.



Railcar Shortage Eases but Railroad Problems Persist

Gerome J. Hammond and Edward I. Reinsel*

The acute railcar shortage that began in late 1972 and continued into 1974 has now eased. However, railroading remains a troubled industry as shown by several bankruptcies in the Midwest-Northeast regions and an industry return on net investment of about 3 percent. Other indicators of railroad problems are the backlog of applications for rail-line abandonment and complaints of shippers concerning deteriorating service and rising rates.

Farmers and other rural shippers are concerned that chronic problems within the rail industry will limit the ability of railroads to provide adequate and reasonably priced rail services. Shippers see inadequate rail transportation as a possible continuing constraint on production and marketing.

Railcar Situation

Although some shippers could face local shortages in the post-harvest season of 1975, the outlook for railcars is generally optimistic. Stocks of grains and soybeans are down from those of 2 years ago and farm and local storage facilities should be able to handle much of the 1975 crop. Even record crops and a strong export market would be unlikely to strain the transportation system to the extent it was strained during 1972-74.

Rail Abandonment and Declining Mileage

Rail mileage has been declining, especially in recent years, because of abandonment. There has been little new construction. Line-haul railroad mileage, which excludes yards, sidings, and parallel tracks, decreased about 1,200 miles per year during 1960-72 (table 1). States losing the largest annual percentages of their line-haul track were often those in the urbanized Northeast, but declines in several farm States were substantial. For example, Iowa, Minnesota, and South Dakota were heavy losers.

Table 1—Line-haul railroad mileage, by region, 1960 and 1972

Region	Line-haul mileage		Decrease 1960-72	
	1960	1972		
	Miles	*Miles*	*Miles*	*Percent*
Northeast	25,022	22,303	2,719	10.8
Lake States	21,007	19,508	1,499	7.1
Corn Belt	41,259	38,902	2,357	5.7
Northern Plains	23,050	21,448	1,602	7.0
Appalachian	19,032	18,249	783	4.1
Southern Plains	18,439	17,147	1,292	7.0
Delta States	11,468	10,966	502	4.4
South Plains	20,532	18,663	1,869	9.1
Mountain	21,355	20,314	1,041	4.9
Pacific	16,388	15,799	589	3.6
United States	217,552	203,299	14,253	6.6

Source: Transport Statistics in the United States, Interstate Commerce Commission, Wash., D.C., and Association of American Railroads Yearbook of Railroad Facts, various years.

*Agricultural Economists, National Economics Analysis Division, Economic Research Service.

The Interstate Commerce Commission (ICC) has permitted railroads to abandon more than 66,000 miles of railroad line since the Transportation Act of 1920 was passed. About one-third of this mileage was abandoned after 1960. During 1960-74 most of the ICC decisions granted the right to abandon. Abandonment applications filed with ICC for fiscal years 1971, 1972, and 1973 alone involved more than 11,000 miles of rail line, including over 4,400 miles in 1973, a record amount.

Abandonment application mileage nearly dropped in half in 1974. The decline was mainly attributable to a court order that ICC state publicly whether abandonment would significantly affect the environment. Another factor was the Regional Rail Reorganization Act which slowed abandonment in the Midwest-Northeast regions.

In early January 1975, there were 365 abandonment cases totaling nearly 7,700 miles pending before the ICC. More miles were being considered for abandonment in the Corn Belt than in any other region; the Northeast was a close second (table 2).

From the railroads' viewpoint, abandonment of some rail track is necessary because many lines do not carry enough goods to pay their way and instead are operated at the expense of the total rail system. But shippers and

Continued on page 9, column 1.

Table 3—Potentially excess railroad mileage in the Midwest-Northeast as designated by the U.S. Department of Transportation, 1972

State	Total railroad mileage	Potentially excess[1]	
		Miles	Percent of total
Illinois	10,822	2,650	24
Indiana	6,405	2,350	37
Michigan	6,159	2,275	37
Ohio	7,804	2,500	32
Subregion total	31,190	9,775	31.3
Connecticut	664	175	26
Maine	1,666	75	5
Massachusetts	1,430	475	33
New Hampshire	817	400	49
Rhode Island	146	25	17
Vermont	766	250	33
Subregion total	5,489	1,400	25.5
New York	5,595	1,875	34
New Jersey	1,742	300	17
Pennsylvania	8,273	1,450	18
Subregion total	15,610	3,625	23.2
Delaware	291	75	26
Maryland	1,110	225	20
Virginia	3,895	275	7
West Virginia	3,569	200	6
District of Columbia	30	0	0
Subregion total	8,895	775	8.7
Region total	61,184	15,575	25.4

[1] Does not include mileage in zones not served by bankrupt railroads.

Source: Rail Service in the Midwest and Northeast Region, Volume 1, U.S. Department of Transportation, February 1, 1974.

Continued from p. 8.

communities depending on rail lines that are abandoned often suffer. Industry relocation may sometimes be possible, but where there is substantial investment in fixed plant and facilities, shippers must resort to higher cost modes of transportation.

Regional Rail Reorganization

The railroad systems in the Northeast and parts of the Midwest are undergoing reorganization by way of the Regional Rail Reorganization Act of 1973. The Act: (1) established the United States Railway Association to plan and finance the restructuring of this ailing system; (2) directed the establishment of the Consolidated Rail Corporation to operate and modernize parts or all of the restructured system; (3) allowed for future abandonment of unnecessary services; and (4) established an interim joint Federal-State subsidy program for continuation and improvement of local rail services which would not be included in the Corporation's or other solvent railroads' operations.

Using reports of the Department of Transportation and ICC, the U.S. Railway Association is developing a preliminary rail system plan. The preliminary system plan was to be released last October but the deadline was delayed to February 26, 1975. Because the plan will show rail lines and facilities recommended to be included in the regional rail system, it is of considerable importance to rail users. The plan is likely to specify some abandonment. Federal subsidies will be available to help States continue essential service on lines that are not in the final system plan (table 3).

Rail Rates Increase

Few rate increases were granted during the 1972-73 period of heavy grain shipments. Also, the increases were partly offset by a variety of incentive rates for shippers who were willing to forego enroute grain inspections and diversions. Lower rates were made available for unit trains, run-through trains, and in some cases for special routing.

Rail rates rose sharply during the first half of 1974. The rate increases granted by the ICC for domestic grain shipments amounted to more than 21 percent during 1974. Export shipment rates rose nearly a third. Almost half of the increase in 1974 was earmarked for improvements in facilities and tracks and for purchase of equipment. A further increase of 7 percent was requested in January 1975 but denied by the ICC in February.

Table 2—Abandonment cases pending before Interstate Commerce Commission, by State, January 1975

Region and State	Cases[1]	Miles	Region and State	Cases[1]	Miles
Northeast			Corn Belt		
Maine	3	34	Ohio	30	575
New Hampshire	3	139	Indiana	31	486
Vermont	1	2	Illinois	16	365
Massachusetts	8	40	Iowa	18	400
Rhode Island	3	15	Missouri	5	102
Connecticut	5	50	Total	100	1,928
New York	28	426			
New Jersey	6	43	Northern Plains		
Pennsylvania	54	767	North Dakota	2	18
Delaware	3	24	South Dakota	5	317
Maryland	13	186	Nebraska	7	281
District of Columbia	0	--	Kansas	5	154
Total	127	1,726	Total	19	770
Lake States			Southern Plains		
Michigan	28	786	Texas	6	147
Wisconsin	11	375	Oklahoma	4	76
Minnesota	19	410	Total	10	223
Total	58	1,571			
			Mountain		
Appalachian			Montana	4	136
Virginia	3	86	Idaho	4	71
West Virginia	7	28	Wyoming	0	--
North Carolina	2	44	Colorado	3	61
Kentucky	2	23	New Mexico	0	--
Tennessee	7	143	Arizona	0	--
Total	21	324	Utah	1	4
			Nevada	2	24
Southeast			Total	14	296
South Carolina	2	54			
Georgia	4	80	Pacific		
Florida	3	71	Washington	2	31
Alabama	3	37	Oregon	2	19
Total	12	242	California	8	72
			Hawaii	0	--
Delta States			Alaska	0	--
Mississippi	6	316	Total	12	122
Arkansas	4	73			
Louisiana	4	90	Total U.S.	365	7,681
Total	14	479			

[1] Numbers of cases by States do not add to U.S. total because 22 cases included track in two States.

Source: Special tabulations of abandonment applications provided by Interstate Commerce Commission.

FERTILIZER BILL

The farmer's bill for fertilizers will continue to grow in 1975. But nitrogen and phosphates may be a little more readily available.

Farmers paid $2.9 billion for plant food in 1973. Then, in 1974, prices shot up. Farmers applied 10 percent more nitrogen and potash and the same amount of phosphate as in 1973.

This lifted the farm fertilizer bill to $5½ billion for 1974. With the price spiral running more slowly now, farm fertilizer prices are likely to average 10-15 percent higher this spring than last fall. More fertilizer will be available this year, and farmers need it to cover more acres. Their fertilizer bill will increase, perhaps to $6½ billion for 1975.

Nitrogen

More nitrogen will be applied this year as farmers shoot for more grain production. Last year short fertilizer supplies affected application rates per acre, with a varying impact by crop. Nitrogen applications to corn were hard hit, and fell by a tenth to 102 pounds per acre. This year, more adequate supplies are anticipated and farmers have not rushed—as they did last year—to lock in supplies prior to planting time. This has resulted in the normal buildup of inventories over winter, in contrast to last season's sellout.

With the expected increase in prices, farmers may pay an average of $250 per ton for ammonia this spring. Other nitrogen fertilizers will be up in price, too. Urea remains a question mark. Heavy use of urea in livestock rations as a substitute for soybean meal has competed with its use as fertilizer. But with shifting prices of urea, grain, and livestock, demand for urea has slumped.

Phosphates

Phosphate production also is increasing, with much of the new capacity intended for export. Even so, several new plants are opening in time to boost availability for spring planting. Farmers may increase phosphate use by 10 percent this year at present price relationships. Very strong demand is anticipated this spring. This may result in a 10-percent price increase during the peak months of use. Strong domestic and export demand will maintain these higher prices through the year.

Phosphate rock prices were tripled by Morocco in 1974, from $14 to $42 per ton. As a leading exporter, Morocco is able to unilaterally dictate the price trend. On January 1, 1975, the price was increased to $68 per ton. American mines have raised their prices also, but are still below Moroccan quotations.

Potash

Potash will be tight this year. World demand has absorbed much of the output from all deposits now being mined. Tight supplies of potash in North America will limit the increase in potash use by American farmers to about 3 percent this year.

Land Rush Slows

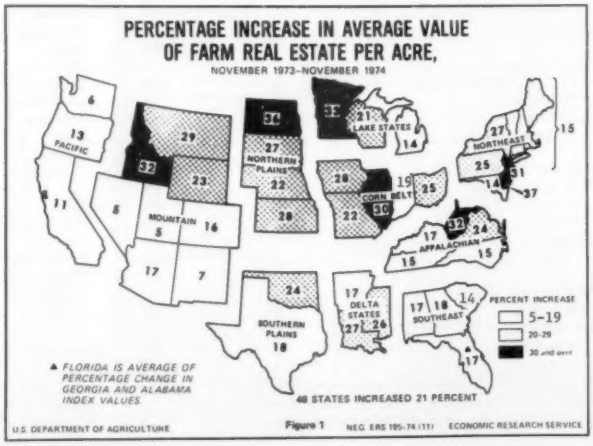
The headlong gallop in farm real estate values has slowed to a canter in the past few months. This pace is likely to continue a while.

Farm real estate values per acre rose 21 percent during the year ended November 1974. However, half of this increase happened during the first 4 months of the period. Thereafter, several factors pulled the reins: Would-be purchasers encountered tightening credit and higher interest rates; livestock producers suffered a decline in their income prospects. Another factor affecting land values has been a slump in demand for second homes and recreational properties. On the other hand, nonfarm investors have been turning to productive farmland as an alternative to the lackluster performance of stocks and urban real estate.

During the most recent survey period of March-November 1974, increases in land values remained strong in cash grain areas of the country while they slowed sharply in the rangeland-livestock areas. With short crops, lower carryovers, and high export demand, grain prices have remained high. However, livestock prices have been lower, especially relative to feed costs. Even though prime rates have slackened significantly, especially during the first part of January, rural real estate loan rates have remained stable.

With money markets contracting and interest rates soaring between July and October 1974, rates of land transfers slowed sharply. During the third quarter of 1974, interest rates on new mortgage loan commitments by life insurance companies reached an average 9.7 percent and rates quoted by the various Federal land banks ranged between 8 and 9 percent.

Although interest rates for farm real estate loans were high and rising during the year, the volume of new money loaned rose sharply with insurance companies lending over $900 million and the Federal land banks lending in excess of $3.3 billion. Lending by sellers of farm real estate also appeared to increase sharply.



Foreign Focus

Closing the Real Food Gap

Richard M. Kennedy*

Discussions of world food problems usually turn very quickly to a consideration of the nature and size of "the food gap." Some define this gap as the amount of food by which world food production falls short of world food needs. This concept is often combined with the view that world demand for food, spurred by continuing population growth and rising affluence, has begun to outrun the productive capacity of the world's farmers and fishermen.

The ERS study, *The World Food Situation and Prospects to 1985*, concludes that it is the gap between production and demand for food in the developing countries that should be of primary concern in the next decade, and that world food production can keep a half step ahead of population growth while providing increases in per capita consumption. The basis for these conclusions is a set of alternative projections to 1985 of world grain production, consumption, and trade supported by an analysis of prospective supply and demand conditions.

The projections focus on grain (wheat, coarse grains, and milled rice) the most important component of the world's food supply. Grain accounts for between 30 and 70 percent of the value of food production, and as much as three-fourths of the total calories consumed by many of the world's poorest people.

The principal differences between the four alternative demand projections are in the assumptions about varying rates of economic growth throughout the world. Population growth provides the largest component of demand (the UN medium projections are used except for the United States), but changes in that rate are likely to have a greater impact in the longer run than in the space of a decade.

Supply responses for the first three of the alternative projections are based on analysis of the impact of changing patterns of land use and availability and technological innovation and input use on yields. It is also assumed that major exporters can and will adjust supply rather than permit either the continuation of unusually high prices and low stock levels, or the appearance of sizable surpluses.

Under alternatives I, II, and III the developing countries (including China) experience net deficits in cereals because their productivity fails to keep pace with demand generated by both rising income and rapid population growth. The developed countries (including the Soviet Union and Eastern Europe) have the productive and export capacity to meet these deficits in all three cases, making possible an increase in per capita consumption in the developing countries.

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The assumption of moderate economic growth (a resumption of the trend pace set before the current slowdown) would result in a net deficit of about 59 million tons of cereals in the developing world under Alternative I. This deficit would only be reduced slightly, to about 52 million tons, if economic growth should instead slow and not recover until the early 1980's, as assumed under Alternative III. If however, economic growth should accelerate, as assumed under Alternative II, and raise the demand for grain-fed livestock products around the world, the deficit might reach 78 million tons. These projections thus suggest a doubling or tripling of developing countries' deficit from about 24 million tons during 1969-71. What might the world cereals picture look like if these projections hold?

—Grain prices in *real* terms would likely be somewhat above the lows of the 1970 base period, but below—even in the high demand alternative—current high levels.

—Consumption of wheat and rice would grow less rapidly than coarse grains because of faster growth in feed demand generated by expanding livestock and poultry production in the developed world.

—The gap between grain production and consumption in developing countries would be met mostly with wheat imports.

—The developed importing countries would continue to increase their feed grain imports.

But where would the developing countries obtain the means for financing such massive imports? They probably could not afford such imports except by increasing their export earnings to improbably high levels, by diverting foreign exchange needed for high priority development projects, or by obtaining considerably more foreign assistance than has been available in recent years.

If an ever-increasing transfer of grain from the developed to the developing countries is not feasible or desirable, what can be done to reverse the trend and close the food gap? The only other way to close the gap while maintaining growth in per capita consumption would be for the developing countries to increase their agricultural productivity.

The alternative IV projection explores this approach by examining the effects on yields in the developing countries of increasing fertilizer by 1 to 1½ percent above the 1960-72 annual growth trend, or by about 10 to 15 million tons by 1985. The improved response also implies increased use of a bundle of other inputs such as irrigation, pesticides, and hybrid seed. Estimates of fertilizer response were

Continued on page 12.

Food Study

For a copy of the complete study, *The World Food Situation and Prospects to 1985*, FAER-98, clip this coupon and send with your name, address, and Zipcode to:

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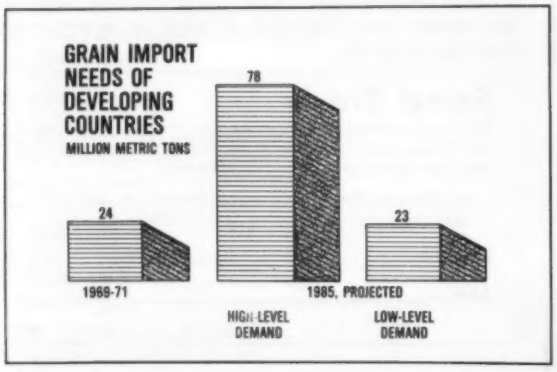
Food Gap, continued from page 11.

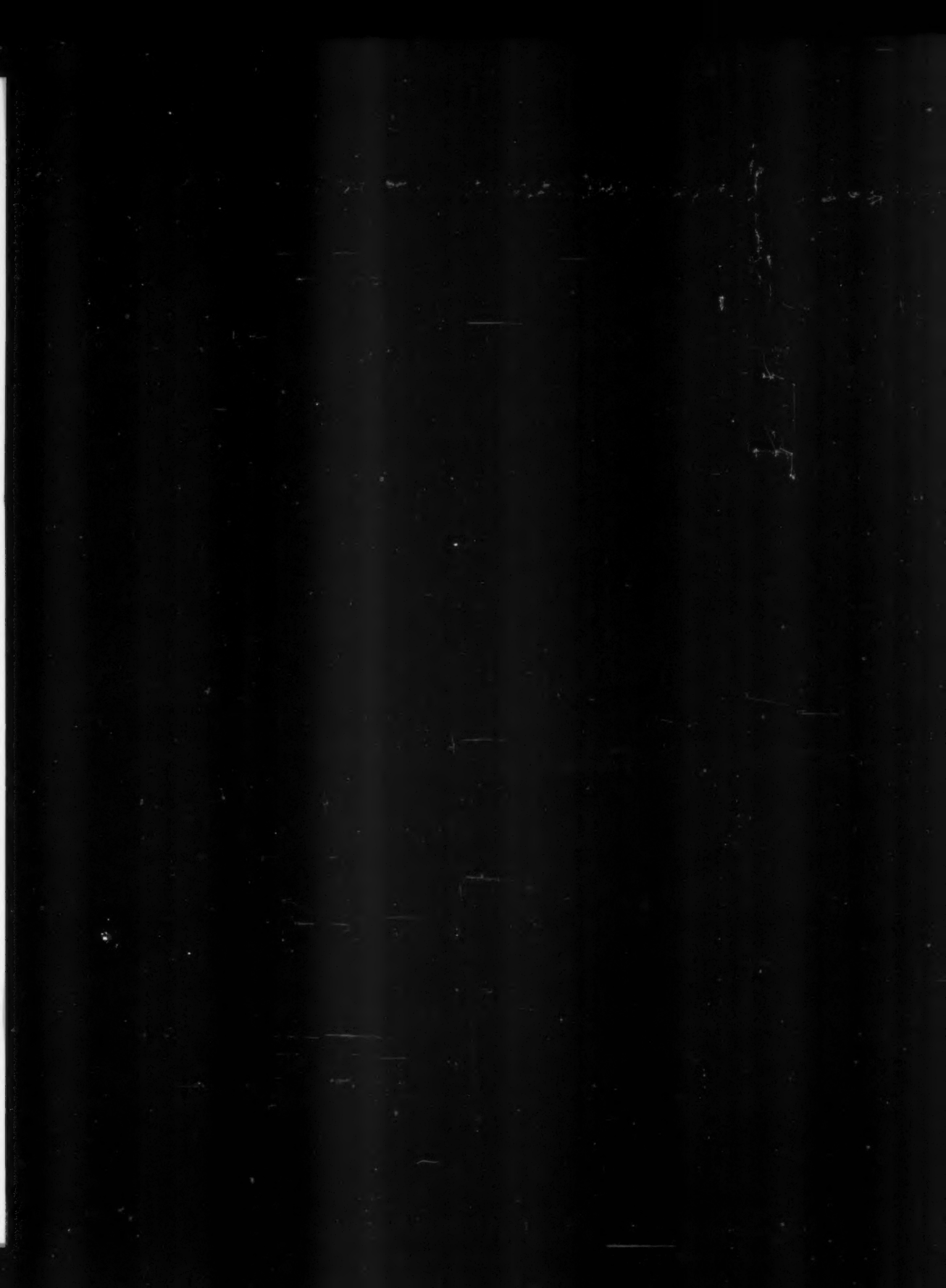
derived from farm management and experiment station data or from estimates of a region's natural resources and level of technological development.

Under this fourth alternative, the grain deficit of the developing countries falls to around 23 million tons, about 1 million tons less than in the base period. If China is not included among the developing countries, the gap is narrowed by around 5 million tons. While the cost of providing increased inputs would be substantial and could not be borne by the developing countries alone, it would still be less than the cost of filling the gap with imports.

For the sake of simplicity, this discussion has dealt with the developing countries as if they all were very much alike. Actually, concrete efforts to improve their food supplies need to take account of their great diversity.



The projections discussed above assume a very substantial increase in food production by both the developed and developing countries. What will it take to achieve such increases, and is it really possible? The answer depends upon the availability of resources, yield-increasing technology, compatible weather, and producer incentives. It is also influenced by the efficiency of marketing and distribution systems and the size, organization, and efficiency of agricultural enterprises.

An FAO survey indicates that less than one-half of the available cultivable land in the developing countries (excluding the Near East) is being used for crops, and that much of the unfarmed land (located mostly in Latin America and Africa) could be brought into production at a feasible cost. However, much of this land lies outside the most densely populated areas of Asia and the Far East. Thus, a good part of future food production will have to come from yield-increasing techniques.

Much of the additional fertilizer needed for the improved yields will come from the sizable expansion in world fertilizer production capacity which is underway or was announced in the last year. The added output should cause prices to fall to more moderate levels and produce ample supplies by 1980 compatible with the production levels implied by projection Alternatives I, II, and III. The World Bank has made similar projections which imply a somewhat higher level of fertilizer demand and suggest a greater need for the construction of fertilizer plants in the developing countries. But achievement of the production increases discussed under Alternative IV would require a greater investment in capacity than envisioned in either the World Bank or ERS projections.